



1999 Toxics Release Inventory

MARYLAND

Reported Releases and Waste Management Activities (in pounds)

| | Original Industries | New Industries | Total |
|---|---------------------|--------------------|--------------------|
| On-site Releases | 12,965,131 | 29,981,553 | 42,946,684 |
| Air Emissions | 7,993,798 | 29,622,447 | 37,616,245 |
| Surface Water Discharges | 2,625,929 | 223,646 | 2,849,575 |
| Underground Injection Class I Wells | 0 | 0 | 0 |
| Underground Injection Class II-V Wells | 0 | 34,700 | 34,700 |
| On-site Land Releases to RCRA Subtitle C Landfills | 0 | 0 | 0 |
| Other On-site Land Releases | 2,345,404 | 100,760 | 2,446,164 |
| Off-site Releases (Transfers Off-site to Disposal)* | 661,090 | 373,312 | 1,034,402 |
| Total On- and Off-site Releases | 13,626,221 | 30,354,865 | 43,981,086 |
| Recycled On-site | 20,289,905 | 18 | 20,289,923 |
| Recycled Off-site | 6,268,088 | 430,284 | 6,698,372 |
| Energy Recovery On-site | 11,482,923 | 0 | 11,482,923 |
| Energy Recovery Off-site | 928,230 | 609 | 928,839 |
| Treated On-site | 26,757,669 | 72,316,641 | 99,074,310 |
| Treated Off-site** | 10,083,425 | 8,900 | 10,092,325 |
| Quantity Released On- and Off-site*** | 13,642,248 | 30,342,021 | 43,984,269 |
| Total Production-related Waste Managed | 89,452,488 | 103,098,473 | 192,550,961 |
| Total Non-production-related Waste Managed | 156 | 586 | 742 |

Transfers Off-site for Further Waste Management/Disposal

| | | | |
|---|-------------------|----------------|-------------------|
| Recycling | 4,342,116 | 430,284 | 4,772,400 |
| Energy Recovery | 913,370 | 609 | 913,979 |
| Treatment | 6,650,030 | 8,888 | 6,658,918 |
| Publicly Owned Treatment Works (POTWs) | 3,395,501 | 0 | 3,395,501 |
| Metals and Metal Compounds* | 87,440 | 0 | 87,440 |
| Non-metal TRI Chemicals** | 3,308,061 | 0 | 3,308,061 |
| Other Off-site Transfers*** | 0 | 0 | 0 |
| Off-site Transfers to Disposal (not including metals to POTWs) | 593,802 | 373,312 | 967,114 |
| Total Transfers Off-site for Further Waste Management/Disposal | 15,894,819 | 813,093 | 16,707,912 |

* Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.

** Transfers to POTWs of non-metals are included in treated off-site waste management activity.

*** Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.

**** Transfers reported without a valid waste management code.

For More Information . . .

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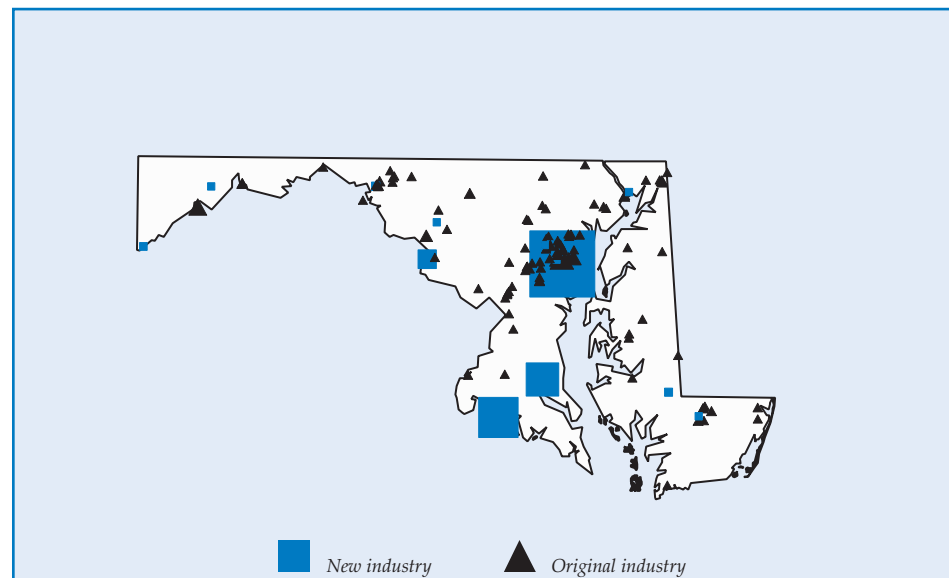
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To obtain TRI data use

assistance, call TRI User
Support Service (TRI-US):

(202) 260-1531

Fax: (202) 401-2347



The largest marker in the state map represents the largest facility for on-site releases in the state of Maryland. All markers are proportionally-sized to represent the on-site releases at each facility within this state.

State/TRI Data

| | |
|------------------|-----------|
| Population | 5,171,634 |
| Square Miles | 9,775 |
| Total Facilities | 195 |
| Total Forms | 676 |
| Form As | 154 |

| | Original Industries | New Industries | Total |
|---|---------------------|----------------|-------------|
| National Rank for Total On- and Off-site Releases* | | | |
| Rank | 36 | 24 | 31 |
| Pounds | 13,626,221 | 30,354,865 | 43,981,086 |
| National Rank for Total On-site Releases** | | | |
| Rank | 36 | 24 | 31 |
| Pounds | 12,965,131 | 29,981,553 | 42,946,684 |
| National Rank for Total Releases within State*** | | | |
| Rank | 36 | 24 | 32 |
| Pounds | 13,881,617 | 30,560,396 | 44,442,013 |
| National Rank for Production-related Waste Managed | | | |
| Rank | 36 | 16 | 33 |
| Pounds | 89,452,488 | 103,098,473 | 192,550,961 |

* Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.

** Includes amounts released at the facility. Excludes amounts transferred to other sites.

*** Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.



1999 Toxics Release Inventory

MARYLAND

On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Original Industries)

| CAS Number | Chemical | On-site Releases | | | | Off-site Releases | Total Releases in the State** | Off-site Transfers to Disposal | | |
|------------|------------------------|----------------------|---------------------------------|------------------------------|---------------------------------|--|-------------------------------|--------------------------------|---------------------------------|---------------------------------|
| | | Air Emissions Pounds | Surface Water Discharges Pounds | Underground Injection Pounds | On-site Releases to Land Pounds | Transfers Off-site to Disposal* Pounds | | Transferred Into State Pounds | Transferred Within State Pounds | Transferred Out of State Pounds |
| -- | Nitrate compounds | 10 | 2,402,455 | 0 | 84,731 | 9,955 | 2,497,151 | 0 | 9,949 | 6 |
| -- | Manganese compounds | 28,446 | 159,899 | 0 | 2,088,030 | 35,068 | 2,311,443 | 3,405 | 26,890 | 8,178 |
| 463-58-1 | Carbonyl sulfide | 1,594,000 | 0 | 0 | 0 | 0 | 1,594,000 | 0 | 0 | 0 |
| 100-42-5 | Styrene | 930,866 | 0 | 0 | 0 | 277 | 931,143 | 0 | 0 | 277 |
| 67-56-1 | Methanol | 839,628 | 19,950 | 0 | 0 | 66 | 859,644 | 102 | 66 | 0 |
| 7647-01-0 | Hydrochloric acid | 558,557 | 0 | 0 | 0 | 0 | 558,557 | 6,180 | 0 | 0 |
| 1330-20-7 | Xylene (mixed isomers) | 516,801 | 0 | 0 | 0 | 0 | 516,801 | 760 | 0 | 0 |
| 7664-41-7 | Ammonia | 441,231 | 24,099 | 0 | 17,960 | 3,480 | 486,770 | 255 | 2,628 | 852 |
| 7664-93-9 | Sulfuric acid | 444,337 | 0 | 0 | 0 | 0 | 444,337 | 5 | 0 | 0 |
| -- | Glycol ethers | 384,300 | 0 | 0 | 5 | 232 | 384,537 | 1,250 | 232 | 0 |

* Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

** The chemical ranking is based on the amounts in this column.

On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Seven New Industries)

| CAS Number | Chemical | On-site Releases | | | | Off-site Releases | Total Releases in the State** | Off-site Transfers to Disposal | | |
|------------|-------------------|----------------------|---------------------------------|------------------------------|---------------------------------|--|-------------------------------|--------------------------------|---------------------------------|---------------------------------|
| | | Air Emissions Pounds | Surface Water Discharges Pounds | Underground Injection Pounds | On-site Releases to Land Pounds | Transfers Off-site to Disposal* Pounds | | Transferred Into State Pounds | Transferred Within State Pounds | Transferred Out of State Pounds |
| 7647-01-0 | Hydrochloric acid | 24,863,671 | 0 | 0 | 0 | 0 | 24,863,671 | 0 | 0 | 0 |
| 7664-93-9 | Sulfuric acid | 3,253,552 | 0 | 0 | 0 | 0 | 3,253,552 | 0 | 0 | 0 |
| 7664-39-3 | Hydrogen fluoride | 1,329,877 | 0 | 0 | 0 | 0 | 1,329,877 | 0 | 0 | 0 |
| 7440-39-3 | Barium | 3,965 | 54,400 | 0 | 7,300 | 184,000 | 249,665 | 150,000 | 184,000 | 0 |
| 7439-96-5 | Manganese | 2,500 | 138,100 | 0 | 2,200 | 48,000 | 190,800 | 18,000 | 48,000 | 0 |
| -- | Zinc compounds | 6,706 | 787 | 10,800 | 12,900 | 46,296 | 77,489 | 1,952 | 46,291 | 5 |
| 7440-47-3 | Chromium | 1,500 | 20,250 | 0 | 1,350 | 32,000 | 55,100 | 0 | 32,000 | 0 |
| 7440-38-2 | Arsenic | 835 | 500 | 0 | 500 | 51,000 | 52,835 | 0 | 51,000 | 0 |
| -- | Barium compounds | 1,863 | 195 | 1,400 | 48,500 | 0 | 51,958 | 463 | 0 | 0 |
| 7440-02-0 | Nickel | 38,250 | 1,400 | 0 | 250 | 12,000 | 51,900 | 0 | 12,000 | 0 |

* Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

** The chemical ranking is based on the amounts in this column.



1999 Toxics Release Inventory

MARYLAND

On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Original Industries)

| Facility, City, County | On-site Releases | | | | | | Total On-site Releases* Pounds | Off-site Releases (Transfers Off-site to Disposal) | |
|--|-----------------------|---------------------------------|----------------------|-------------------------|----------------------------------|------------------------------------|--------------------------------|--|---------------------------------|
| | Underground Injection | | | | On-site Releases to Land | | | Transferred Within State Pounds | Transferred Out of State Pounds |
| | Air Emissions Pounds | Surface Water Discharges Pounds | Class I Wells Pounds | Class II-V Wells Pounds | RCRA Subtitle C Landfills Pounds | Other On-site Land Releases Pounds | | | |
| Millennium Inorganic Chemicals Inc. - Hawkins Point Plant, Baltimore, Baltimore City | 1,141,515 | 140,000 | 0 | 0 | 0 | 1,200,000 | 2,481,515 | 0 | 0 |
| Grace Davison, Baltimore, Baltimore City | 268,406 | 1,339,800 | 0 | 0 | 0 | 0 | 1,608,206 | 13,953 | 9,441 |
| Westvaco Corp. Fine Papers Div., Luke, Allegany | 1,527,179 | 0 | 0 | 0 | 0 | 8,064 | 1,535,243 | 244,670 | 95 |
| Bethlehem Steel Corp. - Sparrows Point Div., Sparrows Point, Baltimore | 110,700 | 33,505 | 0 | 0 | 0 | 1,023,200 | 1,167,405 | 0 | 7,060 |
| Chemetals Inc. Baltimore Plant, Baltimore, Baltimore City | 22,243 | 988,179 | 0 | 0 | 0 | 23,889 | 1,034,311 | 58 | 0 |
| Eastalco Aluminum Co., Frederick, Frederick | 600,600 | 40 | 0 | 0 | 0 | 1,000 | 601,640 | 755 | 0 |
| GM North American Truck Group Baltimore, Baltimore, Baltimore City | 453,040 | 903 | 0 | 0 | 0 | 0 | 453,943 | 220 | 1,961 |
| Garden State Tanning Inc. W. D. Byron Plant, Williamsport, Washington | 291,471 | 62,412 | 0 | 0 | 0 | 5 | 353,888 | 25,540 | 58,381 |
| Lehigh Portland Cement Co., Union Bridge, Carroll | 307,005 | 0 | 0 | 0 | 0 | 1,005 | 308,010 | 0 | 0 |
| Terumo Medical Corp., Elkton, Cecil | 300,876 | 0 | 0 | 0 | 0 | 0 | 300,876 | 0 | 0 |

*The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Seven New Industries)

| Facility, City, County | On-site Releases | | | | | | Total On-site Releases* Pounds | Off-site Releases (Transfers Off-site to Disposal) | |
|---|-------------------------|------------------------------------|-------------------------|----------------------------|-------------------------------------|---------------------------------------|-----------------------------------|---|------------------------------------|
| | Underground Injection | | | | On-site Releases to Land | | | Transferred Within State Pounds | Transferred Out of State Pounds |
| | Air Emissions Pounds | Surface Water Discharges Pounds | Class I Wells Pounds | Class II-V Wells Pounds | RCRA Subtitle C Landfills Pounds | Other On-site Land Releases Pounds | | | |
| Brandon Shores & Wagner Complex, Baltimore, Anne Arundel | 12,569,228 | 5,165 | 0 | 0 | 0 | 20,510 | 12,594,903 | 0 | 0 |
| Pepco Morgantown Generating Station, Newburg, Charles | 6,905,795 | 104,150 | 0 | 0 | 0 | 3,100 | 7,013,045 | 156,000 | 0 |
| Chalk Point Generating Station, Aquasco, Prince Georges | 5,493,125 | 38,000 | 0 | 0 | 0 | 2,200 | 5,533,325 | 154,000 | 0 |
| Dickerson Generating Station, Dickerson, Montgomery | 2,331,755 | 73,000 | 0 | 0 | 0 | 6,800 | 2,411,555 | 62,000 | 0 |
| C. P. Crane Generating Station, Baltimore, Baltimore City | 1,887,944 | 72 | 0 | 0 | 0 | 0 | 1,888,016 | 0 | 0 |
| R. Paul Smith Power Station, Williamsport, Washington | 192,292 | 140 | 0 | 0 | 0 | 26,000 | 218,432 | 0 | 0 |
| Vienna Power Plant, Vienna, Dorchester | 162,558 | 0 | 0 | 0 | 0 | 0 | 162,558 | 0 | 0 |
| Mettiki Coal L.L.C., Oakland, Garrett | 6,478 | 1,515 | 0 | 34,700 | 0 | 42,150 | 84,843 | 0 | 0 |
| Baltimore Terminal, Baltimore, Baltimore City | 37,957 | 0 | 0 | 0 | 0 | 0 | 37,957 | 16 | 0 |
| Citgo Petroleum Corp., Baltimore, Baltimore City | 10,834 | 0 | 0 | 0 | 0 | 0 | 10,834 | 0 | 0 |

*The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.



1999 Toxics Release Inventory

MARYLAND

Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Original Industries)

| Facility, City, County | Recycled On-site Pounds | Recycled Off-site Pounds | Energy Recovery On-site Pounds | Energy Recovery Off-site Pounds | Treated On-site Pounds | Treated Off-site Pounds | Quantity Released On- and Off-site* | Total Production- related Waste Managed Pounds | Total Non- Production- related Waste Managed Pounds |
|--|-------------------------------|--------------------------------|---|--|------------------------------|-------------------------------|---|--|---|
| Millennium Inorganic Chemicals Inc. - Hawkins Point Plant, Baltimore, Baltimore City | 0 | 0 | 0 | 0 | 3,700,215 | 0 | 2,481,515 | 6,181,730 | 0 |
| Westvaco Corp. Fine Papers Div., Luke, Allegany | 0 | 1 | 9,132,800 | 200 | 2,508,000 | 2,612,815 | 1,780,008 | 16,033,824 | 0 |
| Grace Davison, Baltimore, Baltimore City | 2,972,700 | 30,524 | 0 | 0 | 4,708,560 | 440 | 1,631,417 | 9,343,641 | 0 |
| Bethlehem Steel Corp. - Sparrows Point Div., Sparrows Point, Baltimore | 0 | 0 | 0 | 0 | 0 | 0 | 1,168,200 | 1,168,200 | 0 |
| Chemetals Inc. Baltimore Plant, Baltimore, Baltimore City | 1,429,440 | 0 | 0 | 0 | 200 | 0 | 1,034,368 | 2,464,008 | 0 |
| Eastalco Aluminum Co., Frederick, Frederick | 13,000,000 | 2,134,000 | 0 | 0 | 2,443,000 | 0 | 600,300 | 18,177,300 | 0 |
| GM North American Truck Group Baltimore, Baltimore, Baltimore City | 0 | 422,457 | 0 | 142 | 86,766 | 5,291 | 481,242 | 995,898 | 0 |
| Garden State Tanning Inc. W. D. Byron Plant, Williamsport, Washington | 0 | 80,236 | 0 | 0 | 335,646 | 0 | 415,227 | 831,109 | 0 |
| Lehigh Portland Cement Co., Union Bridge, Carroll | 0 | 1,000 | 0 | 0 | 0 | 0 | 307,100 | 308,100 | 0 |
| Terumo Medical Corp., Elkton, Cecil | 0 | 0 | 0 | 0 | 0 | 50,795 | 300,876 | 351,671 | 0 |

*The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Seven New Industries)

| Facility, City, County | Recycled On-site Pounds | Recycled Off-site Pounds | Energy Recovery On-site Pounds | Energy Recovery Off-site Pounds | Treated On-site Pounds | Treated Off-site Pounds | Quantity Released On- and Off-site* | Total Production- related Waste Managed Pounds | Total Non- Production- related Waste Managed Pounds |
|---|-------------------------------|--------------------------------|---|--|------------------------------|-------------------------------|---|--|---|
| Brandon Shores & Wagner Complex, Baltimore, Anne Arundel | 0 | 0 | 0 | 0 | 0 | 0 | 12,595,210 | 12,595,210 | 0 |
| Pepco Morgantown Generating Station, Newburg, Charles | 0 | 0 | 0 | 0 | 1,014,000 | 0 | 7,167,004 | 8,181,004 | 0 |
| Chalk Point Generating Station, Aquasco, Prince Georges | 0 | 0 | 0 | 0 | 67,783,000 | 0 | 5,683,005 | 73,466,005 | 0 |
| Dickerson Generating Station, Dickerson, Montgomery | 0 | 0 | 0 | 0 | 3,209,000 | 0 | 2,470,000 | 5,679,000 | 0 |
| C. P. Crane Generating Station, Baltimore, Baltimore City | 0 | 0 | 0 | 0 | 0 | 0 | 1,888,020 | 1,888,020 | 0 |
| R. Paul Smith Power Station, Williamsport, Washington | 0 | 0 | 0 | 0 | 0 | 0 | 218,000 | 218,000 | 0 |
| Vienna Power Plant, Vienna, Dorchester | 0 | 0 | 0 | 0 | 0 | 0 | 162,558 | 162,558 | 0 |
| Mettiki Coal L.L.C., Oakland, Garrett | 0 | 0 | 0 | 0 | 43,000 | 0 | 84,000 | 127,000 | 0 |
| Baltimore Terminal, Baltimore, Baltimore City | 0 | 0 | 0 | 609 | 137,427 | 5,695 | 37,955 | 181,686 | 0 |
| Citgo Petroleum Corp., Baltimore, Baltimore City | 0 | 0 | 0 | 0 | 0 | 0 | 10,835 | 10,835 | 0 |

*The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.